

STATE OF COLORADO

Colorado Water Conservation Board

Department of Natural Resources

1580 Logan Street, Suite 600
Denver, Colorado 80203
Phone: (303) 866-3441
Fax: (303) 894-2578
www.cwcb.state.co.us



July 23, 2013

Colorado State University
Colorado Water Institute
Attn: Reagan Waskom
2002 Campus Delivery
Fort Collins, CO 80523-1033

John W. Hickenlooper
Governor

Mike King
DNR Executive Director

James Eklund
CWCB Director

**RE: Notice to Proceed – ATM Grant – Poudre Basin Water Sharing Work Group
Efforts Leading to Agreement –South Platte River Basin**

Dear Reagan,

This letter is to inform you that the contract to assist in the Poudre Basin Water Sharing Work Group Efforts Leading to Agreement –South Platte River Basin was signed on July 19, 2013. The purchase order will be mailed to you.

With the executed purchase order, you are now able to proceed with the project and continue invoicing the State of Colorado for cost incurred through December 31, 2014. Please indicate the purchase order number and project name on all correspondence sent to CWCB. Upon receipt of your invoice(s), the State of Colorado will provide payment no later than 45 days. I wish you much success in your project.

If you have any questions or concerns regarding the project, please contact Craig Godbout , Interim Project Manager at (303) 866-3441 ext. 3249.

Sincerely,

Dori Vigil, Program Assistant II
Colorado Water Conservation Board
Water Supply Planning Section
1580 Logan Street, Suite 200
Denver CO 80203
(303) 866-3441 x3250
dori.vigil@state.co.us

WATER CONSERVATION BOARD
1313 SHERMAN STREET, ROOM 721
DENVER, CO 80203

DATE: 07-19-13



**PURCHASE
ORDER**
STATE OF COLORADO

Buyer: MAGGIE VAN CLEEF
Phone Number: 303-866-3292
Agency Contact: DORI VIGIL
Phone Number: 303 866 3441

IMPORTANT
The PO# and Line # must
appear on all invoices,
packing slips, cartons
and correspondence

P.O. # OE PDA 14IBC000003 Page# 01

ACC: 07-18-13

State Award #

FEIN 846000545A G Phone: 970-491-6586
Vendor Contact: REGAN WASKOM
Purchase Requisition #:

BID #

V COLORADO STATE UNIVERSITY
E OFFICE OF SPONSORED PROGRAMS
N 2002 CAMPUS DELIVERY
D FORT COLLINS CO 80523-2002
O
R

Invoice in Triplicate

To: DIVISION OF WATER CONSERVATION
1313 SHERMAN STREET, ROOM 721
DENVER, CO 80203

Payment will be made by this agency

Ship To: DIVISION OF WATER CONSERVATION
1313 SHERMAN STREET, ROOM 721
DENVER, CO 80203

Delivery/Installation Date: 12-31-14
F.O.B. DESTINATION STATE PAYS NO FREIGHT

INSTRUCTIONS TO VENDOR:

1. If for any reason, delivery of this order is delayed beyond the delivery/installation date shown, please notify the agency contact named at the top left. (Right of cancellation is reserved in instances in which timely delivery is not made.)
2. All chemicals, equipment and materials must conform to the standards required by OSHA.
3. NOTE: Additional terms and conditions on reverse side.

SPECIAL INSTRUCTIONS:

GOODS ARE NOT TO BE DELIVERED, OR SERVICES PERFORMED
PRIOR TO 7/01/2013

LINE ITEM	COMMODITY/ITEM CODE	UNIT OF MEASUREMENT	QUANTITY	UNIT COST	TOTAL ITEM COST
001	91843000000 CMS#58396 - ATM GRANT - POUDDRE BASIN WATER SHARING GRP EFFORTS LEADING TO AGREEMENTS IN THE SP RIVER BASIN				\$86,940.00

DOCUMENT TOTAL = \$86,940.00

THIS PO IS ISSUED IN ACCORDANCE WITH STATE AND FEDERAL REGULATIONS
This PO is effective on the date signed by the authorized individual.

FOR THE STATE OF COLORADO

EPSPO PAA

Para D. Swice
Authorized Signature

7/19/13
Date

Purchase Order Terms and Conditions

1. Offer/Acceptance. If this purchase order ("PO") refers to vendor's bid or proposal, this PO is an ACCEPTANCE of vendor's OFFER TO SELL in accordance with the terms and conditions of the "solicitation" identified in vendor's bid or proposal. The solicitation includes an RFP, IFB, or any other form of order by buyer. If a bid or proposal is not referenced, this PO is an OFFER TO BUY, subject to vendor's acceptance, demonstrated by vendor's performance or written acceptance of this PO. Any COUNTER-OFFER TO SELL automatically CANCELS this PO, unless a change order is issued by buyer accepting a counter-offer. This PO shall supersede and control over any vendor form(s) or part(s) thereof included in or attached to any bid, proposal, offer, acknowledgment, or otherwise, in the event of inconsistencies or contradictions, regardless of any statement to the contrary in such form(s) or parts thereof. **2. Safety Information.** All chemicals, equipment and materials proposed and/or used in the performance of this PO shall conform to the requirements of the Occupational Safety and Health Act of 1970. Vendor shall furnish all Material Safety Data Sheets (MSDS) for any regulated chemicals, equipment or hazardous materials at the time of delivery.

3. Changes. Vendor shall furnish products and/or services strictly in accordance with the specifications and price set forth for each item. This PO shall not be modified, superseded or otherwise altered, except in writing signed by purchasing agent and accepted by vendor. Each shipment received or service performed shall comply with the terms of this PO, notwithstanding invoice terms or acts of vendor to the contrary, unless this PO has been modified, superseded or otherwise altered in accordance with this section.

4. Delivery. Unless otherwise specified in the solicitation or this PO, delivery shall be FOB destination. Buyer is relying on the promised delivery date, installation, and/or service performance set forth in vendor's bid or proposal as material and basic to buyer's acceptance. If vendor fails to deliver or perform as and when promised, buyer, in its sole discretion, may cancel its order, or any part thereof, without prejudice to its other rights, return all or part of any shipment so made, and charge vendor with any loss or expense sustained as a result of such failure to deliver or perform as promised. Time is of the essence.

5. Intellectual Property. Any software, research, reports, studies, data, photographs, negatives or other documents, drawings or materials (collectively "materials") delivered by vendor in performance of its obligations under this PO shall be the exclusive property of buyer. Ownership rights shall include, but not be limited to, the right to copy, publish, display, transfer, prepare derivative works, or otherwise use the materials. Vendor shall comply with all applicable Cyber Security Policies of the State of Colorado (the "State"), or buyer, as applicable, and all confidentiality and non-disclosure agreements, security controls, and reporting requirements.

6. Quality. Buyer shall be the sole judge in determining "equals" with regard to quality, price and performance. All products delivered shall be newly manufactured and the current model, unless otherwise specified.

7. Warranties. All provisions and remedies of the Colorado Uniform Commercial Code, C.R.S. Title 4-4 (C.U.C.C.), relating to implied and/or express warranties, are incorporated herein, in addition to any warranties contained in this PO or the specifications.

8. Inspection and Acceptance. Final acceptance is contingent upon completion of all applicable inspection procedures. If products or services fail to meet any inspection requirements, buyer may exercise all of its rights, including those provided in the C.U.C.C. Buyer shall have the right to inspect services provided under this PO at all reasonable times and places. "Services" as used in this section includes services performed or tangible material produced or delivered in the performance of services. If any of the services do not conform to PO requirements, buyer may require vendor to perform the services again in conformity with PO requirements, without additional payment. When defects in the quality or quantity of service cannot be corrected by re-performance, buyer may (a) require vendor to take necessary action to ensure that future performance conforms to PO requirements and (b) equitably reduce the payment due vendor to reflect the reduced value of the services performed. These remedies do not limit the remedies otherwise available in this PO, at law, or in equity.

9. Cash Discount. The cash discount period will start from the later of the date of receipt of acceptable invoice, or from date of receipt of acceptable products/services at the specified destination by an authorized buyer representative.

10. Taxes. Buyer and the State are exempt from all federal excise taxes under Chapter 32 of the Internal Revenue Code [No. 84-730123K] and from all State and local government sales and use taxes [C.R.S. Title 39, Article 26, Parts I and II]. Such exemptions apply when materials are purchased for the benefit of State, except that in certain political subdivisions (e.g., City of Denver) vendor may be required to pay sales or use taxes even though the ultimate product or service is provided to buyer. Buyer shall not reimburse such sales or use taxes.

11. Payment. Buyer shall pay vendor for all amounts due within 45 days after receipt of products or services and a correct notice of amount due. Interest on the unpaid balance shall begin to accrue on the 46th day at the rate set forth in C.R.S. §24-30-202(24) until paid in full. Interest shall not accrue if a good faith dispute exists as to buyer's obligation to pay all or a portion of the amount due. Vendor shall invoice buyer separately for interest on delinquent amounts due, referencing the delinquent payment, number of day's interest to be paid, and applicable interest rate.

12. Vendor Offset. [Not Applicable to Inter-governmental POs] Under C.R.S. §24-30-202.4 (3.5), the State Controller may withhold payment under the State's vendor offset intercept system for debts owed to State agencies for: (a) unpaid child support debts or arrearages; (b) unpaid balances of tax, accrued interest, or other charges specified in C.R.S. §39-21-101, et seq.; (c) unpaid loans due to the Student Loan Division of the Department of Higher Education; (d) amounts required to be paid to the Unemployment Compensation Fund; and (e) other unpaid debts owing to the State as a result of final agency determination or judicial action.

13. Assignment and Successors. Vendor shall not assign rights or delegate duties under this PO, or subcontract any part of the performance required under this PO, without the express, written consent of buyer. This PO shall inure to the benefit of and be binding upon vendor and buyer and their respective successors and assigns. Assignment of accounts receivable may be made only upon written notice furnished to buyer.

14. Indemnification. If any article sold or delivered under this PO is covered by a patent, copyright, trademark, or application therefore, vendor shall indemnify and hold harmless buyer from any and all loss, liability, cost, expenses and legal fees incurred on account of any claims, legal actions or judgments arising out of manufacture, sale or use of such article in violation or infringement of rights under such patent, copyright, trademark or application. If this PO is for services, vendor shall indemnify, save, and hold harmless buyer, its employees and agents, against any and all claims, damages, liability and court awards including costs, expenses, and attorney fees and related expenses, incurred as a result of any act or omission by vendor, or its employees, agents, subcontractors or assignees, arising out of or in connection with performance of services under this PO.

15. Independent Contractor. Vendor shall perform its duties hereunder as an independent contractor and not as an employee. Neither vendor nor any agent or employee of vendor shall be deemed to be an agent or employee of buyer. Vendor and its employees and agents are not entitled to unemployment insurance or workers compensation benefits through buyer and buyer shall not pay for or otherwise

provide such coverage for vendor or any of its agents or employees. Unemployment insurance benefits will be available to vendor and its employees and agents only if coverage is made available by vendor or a third party. Vendor shall pay when due all applicable employment, income, and local head taxes incurred pursuant to this PO. Vendor shall not have authorization, express or implied, to bind buyer to any agreement, liability or understanding, except as expressly set forth herein. Vendor shall (a) provide and keep in force workers' compensation and unemployment compensation insurance in the amounts required by law, (b) provide proof thereof when requested by buyer, and (c) be solely responsible for its acts and those of its employees and agents.

16. Communication. All communication concerning administration of this PO, prepared by vendor for buyer's use, shall be furnished solely to purchasing agent.

17. Compliance. Vendor shall strictly comply with all applicable federal and state laws, rules, and regulations in effect or hereafter established, including, without limitation, laws applicable to discrimination and unfair employment practices.

18. Insurance. Vendor shall obtain, and maintain, at all times during the term of this PO, insurance as specified in the solicitation, and provide proof of such coverage as requested by purchasing agent.

19. Termination Prior to Shipment. If vendor has not accepted this PO in writing, buyer may cancel this PO by written or oral notice to vendor prior to shipment of goods or commencement of services.

20. Termination for Cause. (a) If vendor refuses or fails to timely and properly perform any of its obligations under this PO with such diligence as will ensure its completion within the time specified herein, buyer may notify vendor in writing of non-performance and, if not corrected by vendor within the time specified in the notice, terminate vendor's right to proceed with the PO or such part thereof as to which there has been delay or a failure. Vendor shall continue performance of this PO to the extent not terminated and be liable for excess costs incurred by buyer in procuring similar goods or services elsewhere. Payment for completed services performed and accepted shall be at the price set forth in this PO. (b) Buyer may withhold amounts due to vendor as buyer deems necessary to reimburse buyer for excess costs incurred in curing, completing or procuring similar goods and services. (c) If after rejection, revocation, or other termination of vendor's right to proceed under the C.U.C.C. or this clause, buyer determines for any reason that vendor was not in default or the delay was excusable, the rights and obligations of buyer and vendor shall be the same as if the notice of termination had been issued pursuant to termination under §21.

21. Termination in Public Interest. Buyer is entering into this PO for the purpose of carrying out the public policy of the State, as determined by its Governor, General Assembly, and Courts. If this PO ceases to further the public policy of the State, buyer, in its sole discretion, may terminate this PO in whole or in part and such termination shall not be deemed to be a breach of buyer's obligations hereunder. This section shall not apply to a termination for vendor's breach, which shall be governed by §20. Buyer shall give written notice of termination to vendor specifying the part of the PO terminated and when termination becomes effective. Upon receipt of notice of termination, vendor shall not incur further obligations except as necessary to mitigate costs of performance. For services or specially manufactured goods, buyer shall pay (a) reasonable settlement expenses, (b) the PO price or rate for supplies and services delivered and accepted, (c) reasonable costs of performance on unaccepted supplies and services, and (d) a reasonable profit for the unaccepted work. For existing goods, buyer shall pay (e) reasonable settlement expenses, (f) the PO price for goods delivered and accepted, (g) reasonable costs incurred in preparation for delivery of the undelivered goods, and (h) a reasonable profit for the preparatory work. Buyer's termination liability under this section shall not exceed the total PO price plus a reasonable cost for settlement expenses. Vendor shall submit a termination proposal and reasonable supporting documentation, and cost and pricing data as required by C.R.S. §24-106-101, upon request of buyer.

22. PO Approval. This PO shall not be valid unless it is executed by purchasing agent. Buyer shall not be responsible or liable for products or services delivered or performed prior to proper execution hereof.

23. Fund Availability. Financial obligations of buyer payable after the current fiscal year are contingent upon funds for that purpose being appropriated, budgeted and otherwise made available. If this PO is funded in whole or in part with federal funds, this PO is subject to and contingent upon the continuing availability of federal funds for the purposes hereof. Buyer represents that it has set aside sufficient funds to make payment for goods delivered in a single installment, in accordance with the terms of this PO.

24. Choice of Law. State laws, rules and regulations shall be applied in the interpretation, execution, and enforcement of this PO. The C.U.C.C. shall govern this PO in the case of goods unless otherwise agreed in this PO. Any provision included or incorporated herein by reference which conflicts with such laws, rules, and regulations is null and void. Any provision incorporated herein by reference which purports to negate this or any other provision in this PO in whole or in part shall not be valid or enforceable or available in any action at law, whether by way of complaint, defense, or otherwise. Unless otherwise specified in the solicitation or this PO, venue for any judicial or administrative action arising out of or in connection with this PO shall be in Denver, Colorado. Vendor shall exhaust administrative remedies in C.R.S. §24-109-106, prior to commencing any judicial action against buyer.

25. Public Contracts for Services. [Not Applicable to offer, issuance, or sale of securities, investment advisory services, fund management services, sponsored projects, intergovernmental POs, or information technology services or products and services] Vendor certifies, warrants, and agrees that it does not knowingly employ or contract with an illegal alien who will perform work under this PO and will confirm the employment eligibility of all employees who are newly hired for employment in the United States to perform work under this PO, through participation in the E-Verify Program or the Department program established pursuant to C.R.S. §8-17.5-102(5)(c). Vendor shall not knowingly employ or contract with an illegal alien to perform work under this PO or enter into a contract or PO with a subcontractor that fails to certify to vendor that the subcontractor shall not knowingly employ or contract with an illegal alien to perform work under this PO. Vendor shall (a) not use E-Verify Program or Department program procedures to undertake pre-employment screening of job applicants during performance of this PO, (b) notify subcontractor and buyer within three days if vendor has actual knowledge that subcontractor is employing or contracting with an illegal alien for work under this PO, (c) terminate the subcontract if subcontractor does not stop employing or contracting with the illegal alien within three days of receiving notice, and (d) comply with reasonable requests made in the course of an investigation, undertaken pursuant to C.R.S. §8-17.5-102(5), by the Colorado Department of Labor and Employment. If vendor participates in the Department program, vendor shall deliver to the buyer a written, notarized affirmation that vendor has examined the legal work status of such employee, and shall comply with all of the other requirements of the Department program. If vendor fails to comply with any requirement of this provision or C.R.S. §8-17.5-101 et seq., buyer may terminate this PO for breach and, if so terminated, vendor shall be liable for damages.

26. Public Contracts with Natural Persons. Vendor, if a natural person eighteen (18) years of age or older, hereby swears and affirms under penalty of perjury that he or she (a) is a citizen or otherwise lawfully present in the United States pursuant to federal law, (b) shall comply with the provisions of C.R.S. §24-76.5-101 et seq., and (c) has produced a form of identification required by C.R.S. §24-76.5-103 prior to the date vendor delivers goods or begins performing services under terms of the PO.

Statement of Work

WATER ACTIVITY NAME - Poudre Basin Water Sharing Working Group Efforts Leading to Agreements

GRANT RECIPIENT – Colorado Water Institute, on behalf of the Poudre Basin Water Sharing Working Group

FUNDING SOURCE - Colorado Water Conservation Board’s ATM Grant Program and Matching Cash Contributions

INTRODUCTION AND BACKGROUND

Provide a brief description of the project. (Please limit to no more than 200 words; this will be used to inform reviewers and the public about your proposal)

Our focus will be primarily on developing water sharing mechanisms and later agreements for drought year firming for water providers via innovative interruptible water supply agreements (swapping of multiple use water for agricultural water; the leasing of water owned by farmers; agreements in advance to forgo rental water and meet dry-up requirements etc.). These types of agreements can make a significant amount of water available for drought firming and they involve both owned and rented water. In return for agreeing to provide drought protection, irrigators seek rental water availability during normal water years, and fewer attempts to change agricultural decrees held by domestic providers. We also expect that we may be able to develop an equitable pricing strategy for transfers not agreed upon previously. Other water sharing mechanisms that we hope to analyze and adapt to fit the situations found in the Poudre Basin include optimum shared use of infrastructure and modification of water management and delivery to maximize supply and reduce operational costs. This might include the identification and financing of infrastructure improvements such as recharge basins or the dredging of existing reservoirs or other ways of developing water supplies that could be shared.

OBJECTIVE

Convene domestic water providers and agricultural water organizations/stakeholders in the Poudre Basin as a working group to:

1. Provide stability and security for water providers through:
 - a. Drought year firming and recovery
 - b. Limited increases in base supply
2. Provide security for the ag water supply and access to that supply in normal years.
3. Lead to the reduction of “buy and dry” and out-of-basin transfers.
4. Lead to regional cooperation and reduction of conflict.

TASKS

Provide a detailed description of each task using the following format

TASK 1 – Populate Database and Analyze Data

Description of Task

We will collect data from municipal and agricultural water users in the Poudre Basin Working Group. These data will be collected confidentially and on a voluntary basis. These data will be organized with the following considerations:

- The database may take the form of an Excel workbook, Microsoft Access database, or other database format that is convenient for the study participants and allows analysis.
- In order to estimate and control costs, it is assumed that only data for the study stakeholders will be collected and managed in the database.
- There is a need to publish data at a certain level in order to perform a transparent and collaborative analysis; however, the data will be collected to protect individual privacy while also providing needed information for designing water sharing mechanisms. Numbers may be used instead of names when reporting individual shareholder information. Data about an entity's water portfolio or total shares owned in an irrigation company would be collected for that named entity. The group can decide if modifications are needed in the way the database would be presented to others outside the working group.
- In order to facilitate reuse of the database for other basins or studies in the future, effort will be taken to design the database as a template that can be reused.
- In order to allow for integration with South Platte Decision Support System efforts, Division of Water Resources water administration, and other projects in the South Platte, relationships to the State's HydroBase database will be included in the survey and database design. For example, ditches will be identified with water district identifier (WDID) in addition to name.

The database will be used to generate data products, such as graphs and tables that illustrate the following and other information, which is useful for evaluating options for water sharing:

For Domestic Water Providers:

1. What is your portfolio of water rights (direct river rights, ditch company shares, transbasin)
2. Where do you store water?
3. How much drought year firming do you need in order to withstand both a moderate and a severe drought?¹
4. Have you swapped multiple use (MU) water for agricultural water in the past, when and at what ratio of MU to agricultural?
5. What is your chronology of change cases involving agricultural rights, if any, and what lands were taken out of production if any?
6. How much surplus water has been made available for rental or leasing to agriculture in the recent past – both multiple use and agricultural decrees?
7. What quantities do you typically rent to individual producers and to how many individuals (can be anonymous)?

¹ SWSI/IBCC has called for multiple approaches for resolving the statewide gap. Water sharing between agriculture and domestic providers in no way precludes the need for storage, rather is one way to reduce the loss of water from agriculture.

Alternative Agricultural Water Transfer Methods – Grant Application Form

October 2010

8. Have you leased water from agriculture and if so, when and what did you have to pay?
9. Do you own irrigated farmland or have you purchased or partnered with others to purchase easements on irrigated land (Ft Collins, Greeley)?
10. Other items as needed or which arise during working group discussions?

For agricultural users:

1. What is your portfolio of water rights (multiple use, agricultural, native and foreign, priorities)?
2. Where do you store water, what is the original volume of the storage right, and the current useful volume of those reservoirs?
3. What are the main conveyance structures (canals) and what are their typical on and off dates?
4. How many of the shares in your company are owned by irrigators and how many by domestic water providers and how many by other types of owners including out-of-basin owners?
5. How does the ownership of shares break down in your company (anonymous) Can be by category 1-2 shares, 2-5 shares, 5-10 shares etc.?
6. What is the history of transfers of agricultural shares to municipal owners, including out-of-basin owners (anonymous could be by decade rather than annually)?
7. How much rental water dependency is there among these shareholders (perhaps a table with water owned and water rented for each (could be anonymous)?
8. Other items as needed or which arise during working group discussions?

The database and results will be used in subsequent project tasks to evaluate options for water sharing, threats to agricultural water, and trends.

Method/Procedure

Data to be collected from the Group will be determined with consideration of how the responses could be managed in a database (for example, avoid narrative answers and instead request tables of information). After group discussion to finalize data to be collected, participants will compile the data for their organization and deliver the data requested to Steve Malers, who will populate the database and perform an initial analysis that informs the development of water sharing mechanisms and other collaborative efforts. The database will be constructed to allow the group and others to repeat or add to the analysis. A social science survey will follow this data collection (Task 3) and focus on perceptions and intentions of water shareholders along with their characteristics. The results from that study will then also become part of the database.

Who will do: Steve Malers of the Open Water Foundation. The OWF is a new nonprofit organization that is being incorporated to provide open source software for water resources and to support collaborative and transparent data analysis and modeling. Mr. Malers' experience uniquely qualifies him to do this work as he has worked on projects for the state of Colorado for 20 years, including development of Colorado's Decision Support System software. His breadth of experience with complex water database work and his knowledge of the Poudre River and its water users are critical for this piece of the project. Further, Malers' emphasis on the importance of developing reusable database and software tools will add great value to the Alternative Transfer Methods program as it attempts to duplicate what works in one area in other areas.

Deliverable

This open, transparent database (which will protect private information with anonymous data representation) will initially be a product of and for the working group with some degree of availability to others working on such issues (to be decided). The data base will utilize a template that can be replicated and used by others working on similar problems. The analysis will be summarized along with the implications for water sharing mechanisms. The Working Group can later decide if modifications are needed before making the data base available to others.

TASK 2 – Investigate Water Sharing Mechanisms

Description of Task

Investigate the most promising site-specific water sharing mechanisms that would be appropriate (institutionally, economically and otherwise) for the Poudre Basin and which might serve some or all of the participating entities. Develop detailed and synthesized written descriptions for each that can be used to find out if individuals would be interested in participating in agreements for water sharing.

Method/Procedure

This task will be accomplished by convening the full work group and subcommittees as needed to talk through the various mechanisms and how they might work in the particular circumstances in the Poudre Basin, including potential organizational structures that could be established. Legal counsel will help us identify legal and engineering considerations we must take into account, including required changes in water rights. Once we determine which mechanisms would work best and in what form, we will develop a written description of each that can be used in the task 3 survey to find out if individual water owners/renters (shareholders) are interested. We anticipate up to 30 hours of meetings, to be facilitated by Colorado Water Institute and with assistance from legal counsel.

Deliverable

A written description of the mechanisms we want to offer as possibilities to individuals to be surveyed in task 3.

TASK 3 – Survey

Description of Task

This is a survey of those who own irrigation company shares and who frequently rent water from domestic water providers: It has several objectives:

- To examine the perceptions of shareholders with regard to the water sharing mechanisms developed by the working group.
- To find out if the shareholder is likely to participate in future water sharing agreements and if so, which ones.
- For those respondents who express an interest in participating in water sharing agreements, to find out what incentives, pricing methods and terms of agreement seem appropriate.
- For those who respond that they do not want to participate, to understand why.

Alternative Agricultural Water Transfer Methods – Grant Application Form

October 2010

- To understand the characteristics shareholders (ditch company, shares owned, acres irrigated etc.), that can be associated with findings related to the questions above.
- To find out if the subject currently has conservation easements on their irrigated land and or would consider placing an easement on their land/water if it would ensure a long term water sharing agreement.

Dr. Alan Bright of CSU's Department of the Human Dimensions of Natural Resources and one of his graduate students would conduct the study and analyze the results. Dr Bright has done a number of water related studies as well as the State Department of Agriculture's Public Perceptions of Agriculture done every 5 years. Shareholders participating would remain anonymous

Method/Procedure

The research team will work with members of the Working Group to develop the items on the survey. Additionally, a draft of the survey will be piloted with a focus group of shareholders to help finalize the survey. The survey itself will begin with a card sent to a census sample of all the shareholders in each of the irrigation companies participating in the Working Group with the endorsement of the company. The card will have a link to an on-line survey. Those not responding to the on-line survey or those who indicate that they would prefer a hard copy will receive a mail survey. A follow-up postcard will be sent to non-respondents to improve the response rate.

Data will be entered into and analyzed using the SPSS statistical package. Analysis will include descriptive statistics, tests for strength of association, and other parametric and non- parametric tests in accordance with the questions posed by the Working Group. If necessary, a sub-set of follow-up interviews with shareholders may be used to clarify answers.

Deliverable

Deliverables will include the survey itself which may serve as a template for others wishing to test water sharing methods with potential participants. A summary report will be developed and presented to the Working Group with recommendations for the development or finalizing of water sharing mechanisms and the agreements necessary for implementation. It is expected that the study will inform the refinement of both water sharing techniques themselves and the prototype agreements that are developed by the Working Group as well as their implementation.

TASK 4 – Refine Approach

Description of Task

Based on the above, refine the descriptions of the most appropriate water sharing mechanisms and or collaborative efforts regarding infrastructure, pricing or the optimization of water storage, conveyance, conservation or and delivery that may emerge from this process.

Method/Procedure

This task will entail convening the full group and subcommittees as needed into a series of meetings to refine our approach, based on what we learned from the survey. We anticipate up to 15 hours of meetings, to be facilitated by Colorado Water Institute and with assistance from legal counsel. Legal counsel will help us identify legal and engineering considerations we must take into account.

Deliverable

A finalized written set of descriptions for site-specific and basin appropriate water sharing mechanisms or other types of collaboration among Basin water entities that emerge from the process and upon which we will base the development of prototype agreements in task 5.

TASK 5 – Prototype Agreements

Description of Task

Draft prototype agreements between water provider(s) and ag water organization(s)/shareholders or between the water entities themselves. Andrew Jones of Lawrence Jones Custer Grasmick LLP has been identified to perform the legal work required for this task. He will also attend meetings to assist with other tasks of the project, leading up to this task and Task 6. Mr. Jones is the only lawyer in the Poudre Basin who has been working on developing contractual language and agreements for alternative transfers. He has served as legal counsel for several CWCB ATM projects and understands the legal and political complexities involved.

Method/Procedure

The initial drafting of prototype agreements will be accomplished by our legal counsel, followed by a series of meetings with either the full group or subcommittees to working in an iterative fashion to refine the prototypes.

Deliverable

Prototype agreements ready to be used by interested parties within the Poudre Basin and elsewhere.

TASK 6 – Pilot Agreements and Develop Evaluation Approach

Description of Task

Identify parties interested in piloting the Poudre Basin's first water sharing agreements and assist them in the execution of one or more agreements. This task also includes the development of a process to monitor and evaluate the agreement(s) during their pilot period.

Method/Procedure

While the individual parties will need to execute their own agreements and they will likely be members of our work group and others who have been following the efforts of the Working Group. It

Alternative Agricultural Water Transfer Methods – Grant Application Form

October 2010

is expected that the trust and collaboration established by the Working Group will lead to that group being used as a sounding board, source of technical expertise and in other ways supporting the basin's first agreements. We will help them develop a process to monitor and evaluate any such agreements during their pilot period, which can be used with any agreements that are made and serve as a template for evaluation elsewhere.

Deliverable

Any agreement would itself be the most important deliverable. Secondly, A template for evaluating the progress of one or more water sharing agreement including the indicators and standards and monitoring procedures that CWCB's ATM program and others pursuing agreements might utilize or modify for their own use.

REPORTING AND FINAL DELIVERABLE

Reporting: The applicant shall provide the CWCB a progress report every 6 months, beginning from the date of the executed contract. The progress report shall describe the completion or partial completion of the tasks identified in the statement of work including a description of any major issues that have occurred and any corrective action taken to address these issues.

Final Deliverable: At completion of the project, the applicant shall provide the CWCB a final report that summarizes the project and documents how the project was completed. This report may contain photographs, summaries of meetings and engineering reports/designs.

Alternative Agricultural Water Transfer Methods – Grant Application Form

October 2010

BUDGET

Provide a detailed budget by task including number of hours and rates for labor and unit costs for other direct costs (i.e. mileage, \$/unit of material for construction, etc.). A detailed and perfectly balanced budget that shows all costs is required for the State's contracting and purchase order processes. Sample budget tables are provided below. Please note that these budget tables are examples and will need to be adapted to fit each individual application. Tasks should correspond to the tasks described above.

Budget by Task

Total Costs				
	Labor	Other Direct Costs	Total Project Costs	Matching Funds (If Applicable)
Task 1 – Compile and Analyze Database	\$15,000		\$15,000	\$10,000
Task 2—Investigate Water Sharing Mechanisms	\$3,600	\$1,000 (lunches and guest mileage)	\$4,600	
Task 3--Survey	\$10,582	\$7,418 (printing, postage, etc.)	\$18,000	
Task 4—Refine Approach	\$9,000	\$1000 (lunches and guest mileage)	\$10,000	
Task 5—Prototype Agreements	\$8,000		\$8,000	
Task 6—Identify Parties and Encourage Agreements	\$4,000	\$1,000 (lunches and guest mileage)	\$5,000	
Project Management	\$15,000		\$15,000	
Subtotal Hard Costs:	\$65,182	\$10,418	\$75,600	
CSU's Negotiated Indirect with CWCB @ 15%	\$9,777	\$1,563	\$11,340	
Total Hard Costs:	\$74,959	\$11,981	\$86,940	\$10,000

Alternative Agricultural Water Transfer Methods – Grant Application Form
October 2010

Labor Costs by Title and Task

Project Personnel	Project Manager and Facilitator	Project Engineer	Faculty Advisor for Survey	Graduate Student for Survey	Legal Counsel	Total Hard Costs
Hourly Rate:	\$55	\$120	\$71	\$16	\$270	
Task 1 – Compile and Analyze Database		\$15,000				\$15,000
Task 2—Investigate Water Sharing Mechanisms	\$14,602				\$4,000	\$18,602
Task 3--Survey			\$5,702	\$4,878		\$10,580
Task 4—Refine Approach	\$4,000				\$3,000	\$7,000
Task 5—Prototype Agreements					\$8,000	\$8,000
Task 6—Identify Parties and Encourage Agreements	\$2,000				\$4,000	\$6,000
Project Management						
In-Kind Contributions						
Total Hours:	374.58	125	80.31	304.86	70.37	
Cost:	\$20,602	\$15,000	\$5,702	\$4,878	\$19,000	\$65,182

Alternative Agricultural Water Transfer Methods – Grant Application Form
October 2010

Other Direct Costs by Task

Item:	Survey Direct Costs (Printing, Mailing, etc.)	Lunches for Meetings	Mileage Reimbursement for Guest Presenters		Total
Units:		20 lunch meetings	Miles 2000		
Unit Cost:		\$100/meeting	.50/mile		
Task 1 – Compile and Analyze Database					
Task 2—Investigate Water Sharing Mechanisms		\$1,000 (ten meetings with lunches)	\$1000 (multiple guests traveling from outside the region for multiple meetings)		
Task 3--Survey	\$7,418	\$7,418 (printing, postage, etc.)			
Task 4—Refine Approach		\$500 (five meetings with lunches)			
Task 5—Prototype Agreements					
Task 6—Identify Parties and Encourage Agreements		\$500 (five meetings with lunches)			
In-Kind Contributions					
Total Units:		20 lunch meetings	2000 miles		
Total Cost:	\$7,418	\$2,000	\$1,000		\$10,418

Alternative Agricultural Water Transfer Methods – Grant Application Form
October 2010

SCHEDULE

Provide a project schedule including key milestones for each task and the completion dates or time period from the Notice to Proceed (NTP). This dating method allows flexibility in the event of potential delays from the procurement process. Sample schedules are provided below. Please note that these schedules are examples and will need to be adapted to fit each individual application.

Example 1

Task	Start Date	Finish Date
1	July 1, 2013 (or NTP)	October 31, 2013
2	July 1, 2013 (or NTP)	October 31, 2013
3	November 1, 2013	January 31, 2014
4	February 1, 2014	May 31, 2014
5	June 1, 2014	August 31, 2014
6	September 1, 2014	December 31, 2014

NTP = Notice to Proceed

Alternative Agricultural Water Transfer Methods – Grant Application Form

October 2010

PAYMENT

Payment will be made based on actual expenditures and invoicing by the applicant. Invoices from any other entity (i.e. subcontractors) cannot be processed by the State. The request for payment must include a description of the work accomplished by major task, and estimate of the percent completion for individual tasks and the entire water activity in relation to the percentage of budget spent, identification of any major issues and proposed or implemented corrective actions. The last 5 percent of the entire water activity budget will be withheld until final project/water activity documentation is completed. All products, data and information developed as a result of this grant must be provided to the CWCB in hard copy and electronic format as part of the project documentation. This information will in turn be made widely available to the public and help promote the development of alternative agricultural transfer methods.

Additional Information – If you would like to add any additional pertinent information please feel free to do so here.

The above statements are true to the best of my knowledge:

Signature of Applicant:



Print Applicant's Name: Reagan M. Waskom, Director, Colorado Water Institute

Project Title: Poudre Basin Water Sharing Working Group Efforts Leading to Agreements

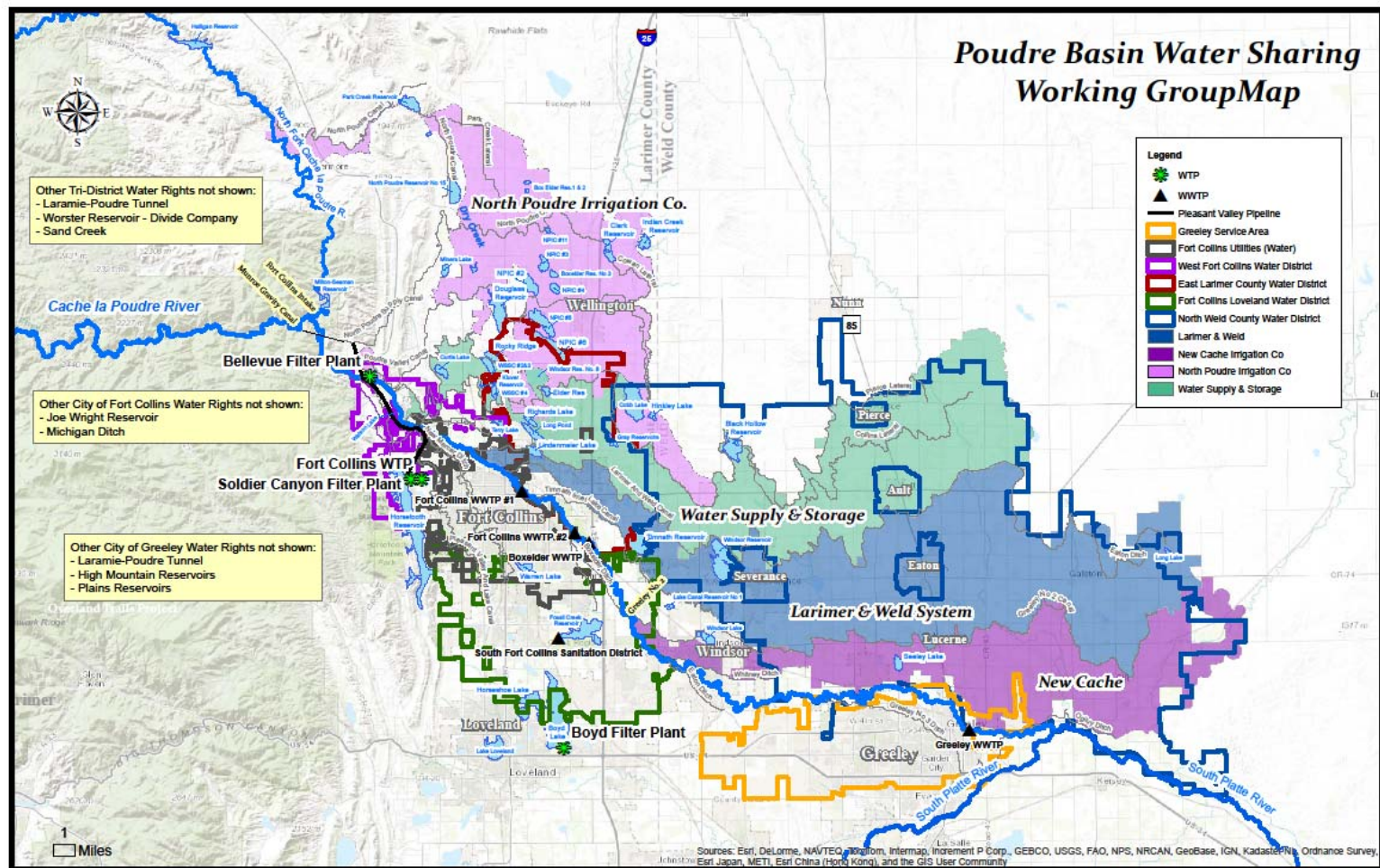
Date: April 15, 2013

Return this application to:

Mr. Todd Doherty
Colorado Water Conservation Board
Water Supply Planning Section
1580 Logan Street, Suite 200
Denver, CO 80203
Todd.Doherty@state.co.us

APPENDIX

Figure 2;



APPENDIX II References

Colorado Water Conservation Board, 2013. FLEX Water Market Summit.

Colorado Water Conservation Board, 2012. Alternative Agricultural Water Transfer Methods Grant Program Summary, Status and Update. November.

Colorado Department of Natural Resources, 2012. Colorado's Water Supply Future: Alternative Agricultural Water Transfer Methods. Summary handout from CWCB. February.

Colorado Open Lands, 2011. Alternatives to Buy and Dry. Summer Bulletin

Northern Colorado Regional Food System Assessment 2011. Larimer, Weld, Boulder Counties.
www.larimer.org/foodassessment/

Smith, Jerd, 2012. Keeping Water on the Farm. IN Headwaters, Fall, pp 24 – 28.

Colorado Water Institute, 2009. Agricultural/Urban/Environmental Water Sharing: Innovative Strategies for the Colorado River Basin.

Arkansas Basin Roundtable, 2008. Considerations for Evaluating Agriculture to Urban Water Transfers

Alternative Agricultural Water Transfer Methods – Grant Application Form
October 2010

The above statements are true to the best of my knowledge:

Signature of Applicant:



Print Applicant's Name: Reagan M. Waskom, Director, Colorado Water Institute

Project Title: Poudre Basin Water Sharing Working Group Efforts Leading to Agreements

Date: April 15, 2013

Return this application to:

Mr. Todd Doherty
Colorado Water Conservation Board
Water Supply Planning Section
1580 Logan Street, Suite 200
Denver, CO 80203
Todd.Doherty@state.co.us